

OpenERP

Open Source Business Applications

OpenERP: 100% pythonic way for business management

Florence, June 23rd 2011

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Origin of "ERP"

In 1990 Gartner Group first employed the acronym ERP as an extension of material requirements planning (**MRP**), later manufacturing resource planning and computer-integrated manufacturing. Without supplanting these terms, ERP came to represent a larger whole, reflecting the evolution of application integration beyond manufacturing.

Not all ERP packages were developed from a manufacturing core. Vendors variously began with accounting, maintenance and human resources. By the mid-1990s ERP systems addressed all core functions of an enterprise. Beyond corporations, governments and non-profit organizations also began to employ ERP systems.

Expansion

"ERP II" was coined in the early 2000s. It describes web-based software that allows both employees and partners (such as suppliers and customers) real-time access to the systems. "**Enterprise application suite**" is an alternate name for such systems

Source: Wikipedia

<<Hello, i'd like tu buy an ERP>>

ORACLE®
Applications

openbravo®
opening ERP's future!™

SAP®

sage

ACG
vision4

Microsoft
Dynamics™

So...

ERP == Software solution?

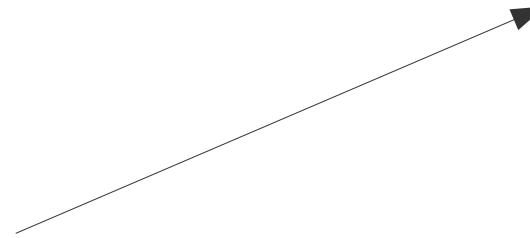


**Yes, untill you buy one
Then software isn't enough anymore**



Open^{ant} ERP

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Actually, ERP is: software + knowledge + people + folk customs + customizations

“turn-key” is just a dream

Open ERP

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Accounting / Sales / HR / ...

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Accounting → Invoicing

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Invoicing → Invoice Object

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Invoice Object →
Invoice Approval Workflow
or
Invoices List View
Or
...

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The role/permissions of Richard
inside the company or just
"Richard"

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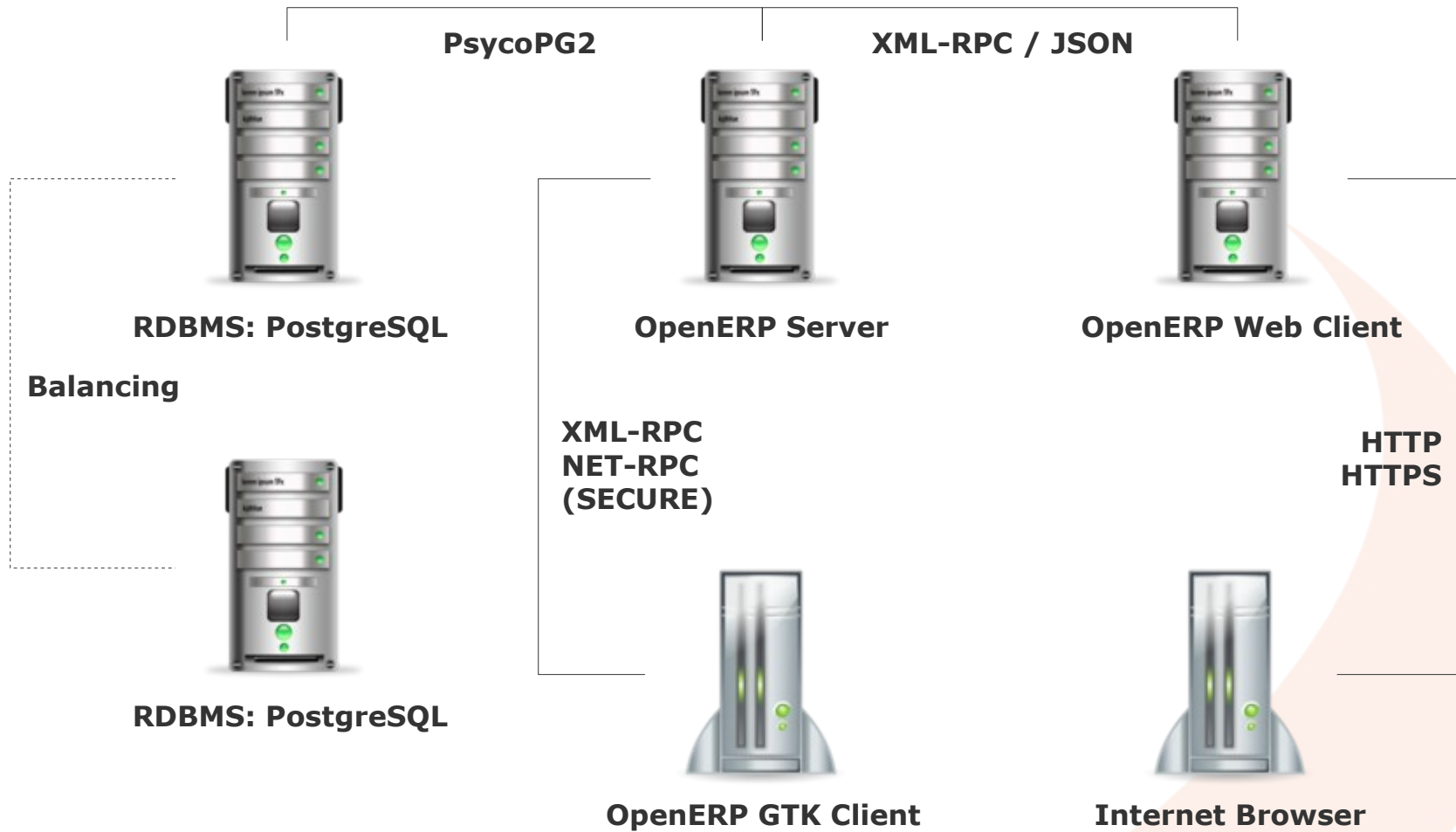
Class: Car
(the product we sell)

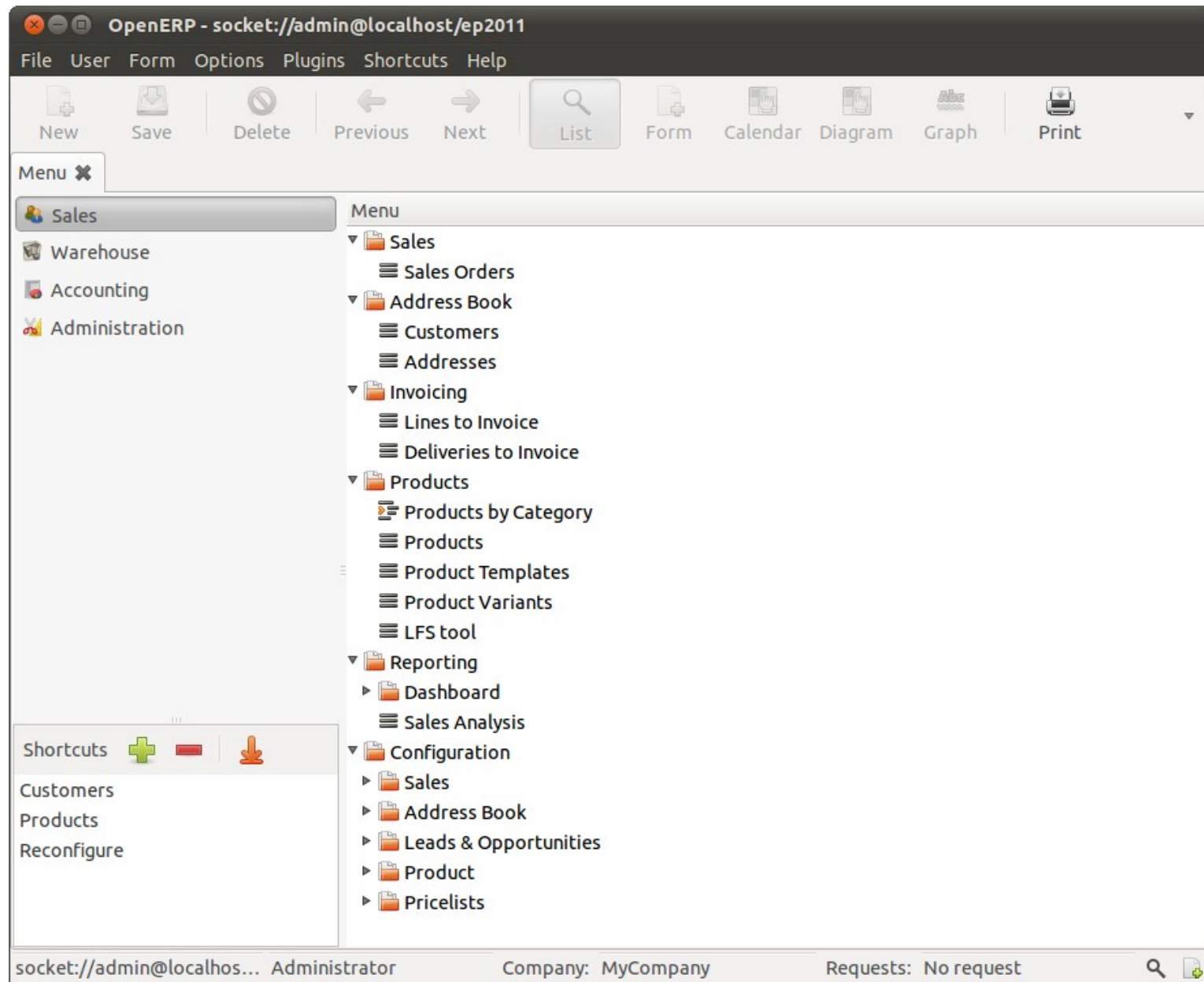
OpenERP

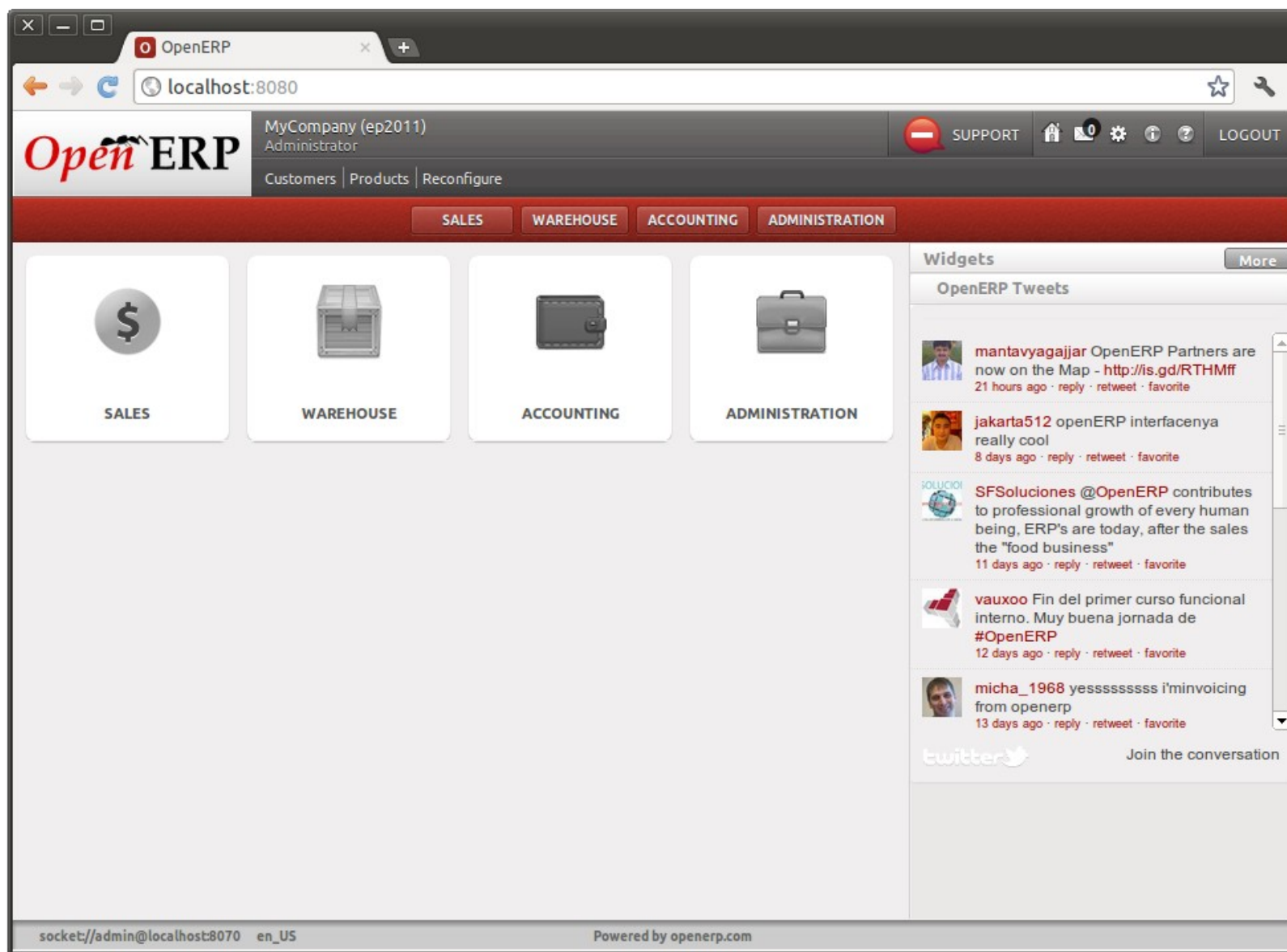
Open Source Business Applications

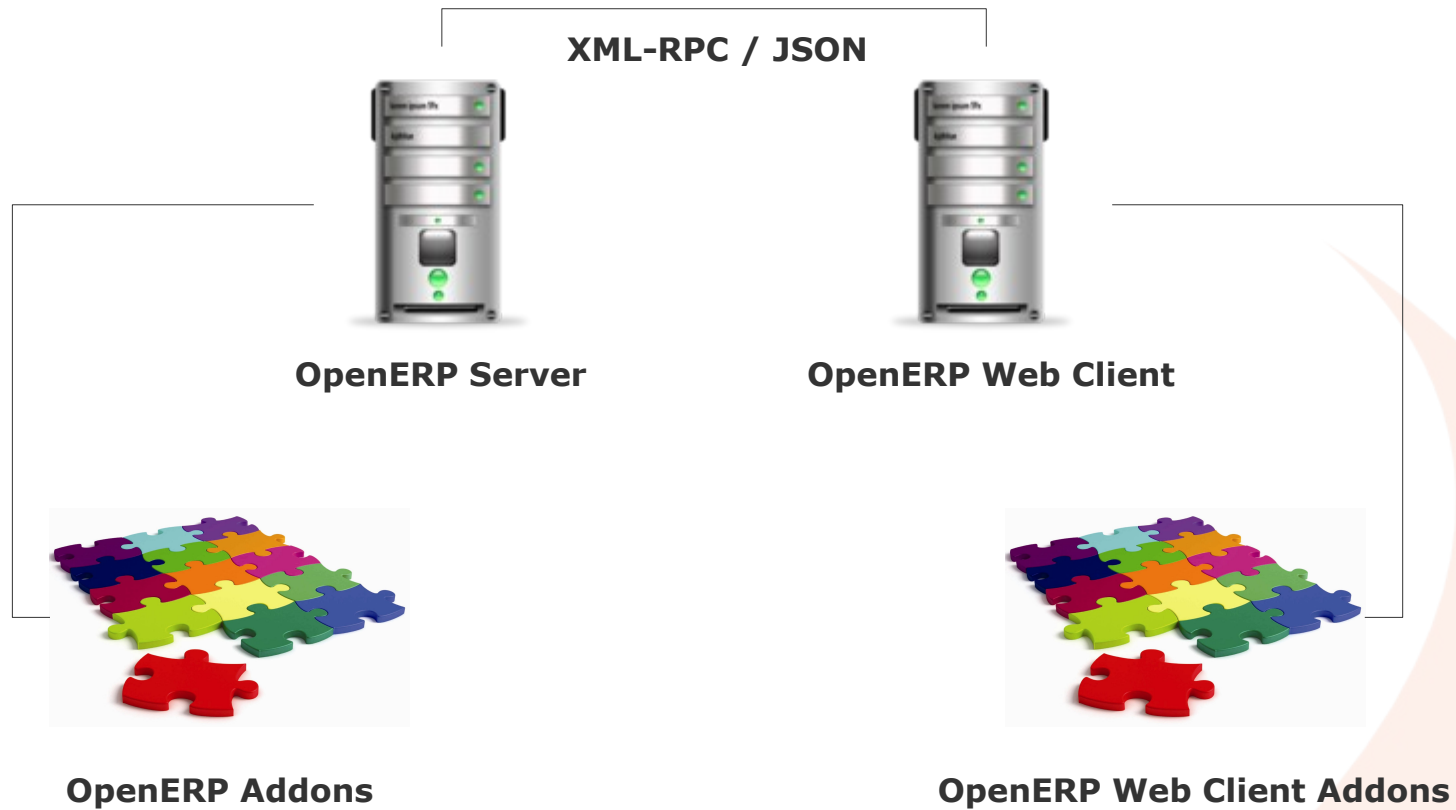


OpenERP POS Client











product_car

__init__.py

__openerp__.py

car.py

car_view.xml



```
*__openerp__.py ✕
1 # -*- encoding: utf-8 -*-
2 #####
3 #
4 #     Copyright (C)
5 #
6 #####
7 {
8     "name" : "Our CAR Object",
9     "version" : "1.0",
10    "author" : "Agile Business Group",
11    "category" : "Generic Modules/EP2011",
12    "description": "" A Car "",
13    "depends" : ["base", "product"],
14    "update_xml" : [
15        "car_view.xml",
16    ],
17    "active": False,
18    "installable": True
19 }
20 |
```



```
car.py x
1 # -*- coding: utf-8 -*-
2 #####
3 #
4 #   Copyright (C)
5 #
6 #####
7
8 from osv import osv, fields
9
10 class car_brand(osv.osv):
11
12     _name = 'car.brand'
13     _description = 'Car Brand'
14
15     _columns = {
16         'name': fields.char('Name',size=64),
17     }
18
19 car_brand()
```



```
32 class product_car(osv.osv):
33
34     _inherit = 'product.product'
35
36     _columns = {
37         'vin_tag': fields.char('VIN Tag',
38                               size=32,
39                               help="The VIN number is ...",
40                               )
41     }
42
43 product_car()
44
```



```
car.py x *car_view.xml x
1 <?xml version="1.0" encoding="utf-8"?>
2 <openerp>
3   <data>
4
5     <record model="ir.ui.view" id="product_car_vin_form">
6       <field name="name">product.car.vin.form</field>
7       <field name="model">product.product</field>
8       <field name="inherit_id" ref="product.product_normal_form_view"/>
9       <field name="type">form</field>
10      <field name="arch" type="xml">
11        <field name="ean13" position="replace">
12          <field name="vin_tag"/>
13        </field>
14      </field>
15    </record>
16
17  </data>
18 </openerp>
19 |
```

OpenERP

MyCompany (ep2011)
Administrator

SUPPORT

CUSTOMERS | PRODUCTS | RECONFIGURE

SALES WAREHOUSE ACCOUNTING ADMINISTRATION

★ Search: Modules ?

☒ INSTALLED
 ☒ NOT INSTALLED
 ☒ TO BE UPGRADED
 ☒ CERTIFIED

Name : Description : Dependencies : State :

car

Group By... Search Clear -- Filters --

NAME	CATEGORY	SHORT DESCRIPTION	AUTHOR	LATEST VERSION	INSTALLED VERSION	STATE
product_car	EP2011	Our CAR Object	Agile Business Group	6.0.1.0	6.0.1.0	Installed

socket://admin@localhost:8070 en_US Powered by openerp.com

Products - OpenERP

localhost:8080/openerp/menu?active=73#url=%2Fopenerp%2Fform%2Fedit%3Fmodel%3Dproduct.product%26id%3DFalse%26ids%3D%26view_ids%

OpenERP

MyCompany (ep2011)
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SUPPORT

CUSTOMERS | PRODUCTS | RECONFIGURE

SALES WAREHOUSE ACCOUNTING ADMINISTRATION

Sales
Address Book
Invoicing
Products
Products by Category
Products
Product Templates
Product Variants
LFS tool
Reporting
Configuration

Products ?

Save Save & Edit Cancel

Name

Codes

Characteristics

Name :

Sku :

Can be Sold ? : ☒

Brand :

VIN Tag ? :

Can be Purchased ? : ☒

Variants :

Is a car : ☐

Information Procurement & Locations Suppliers Descriptions Packaging Images Accounting Accessories SEO

Procurement

Base Prices

Product Type ? : Consumable

Costing Method ? : Standard Price

Procurement Method ? : Make to Stock

Cost Price: Cost Price ? : 1.00

Purchase Extra Cost : 0.00

Supply method ? : Buy

Sale Price ? : 1.00

Tempi Consegna :

Variant Price Margin : 1.00

Descrizione Disponibilità :

Variant Price Extra : 0.00

Weights

Status

Volume ? : 0.000

Category ? : All products

Gross weight ? : 0.000

Status ? : Normal

Net weight ? : 0.000

Product Manager ? :

Packaging :

Stocks

Lots

Reports

Price List
Products Labels
Stock Level Forecast

Actions

Procurement Request

Links

Stock Moves
Future Stock Moves
Stock by Location
Minimum Stock Rules
Product sales
Images

Attachments

Add

Customize

Manage Views
Customize Object

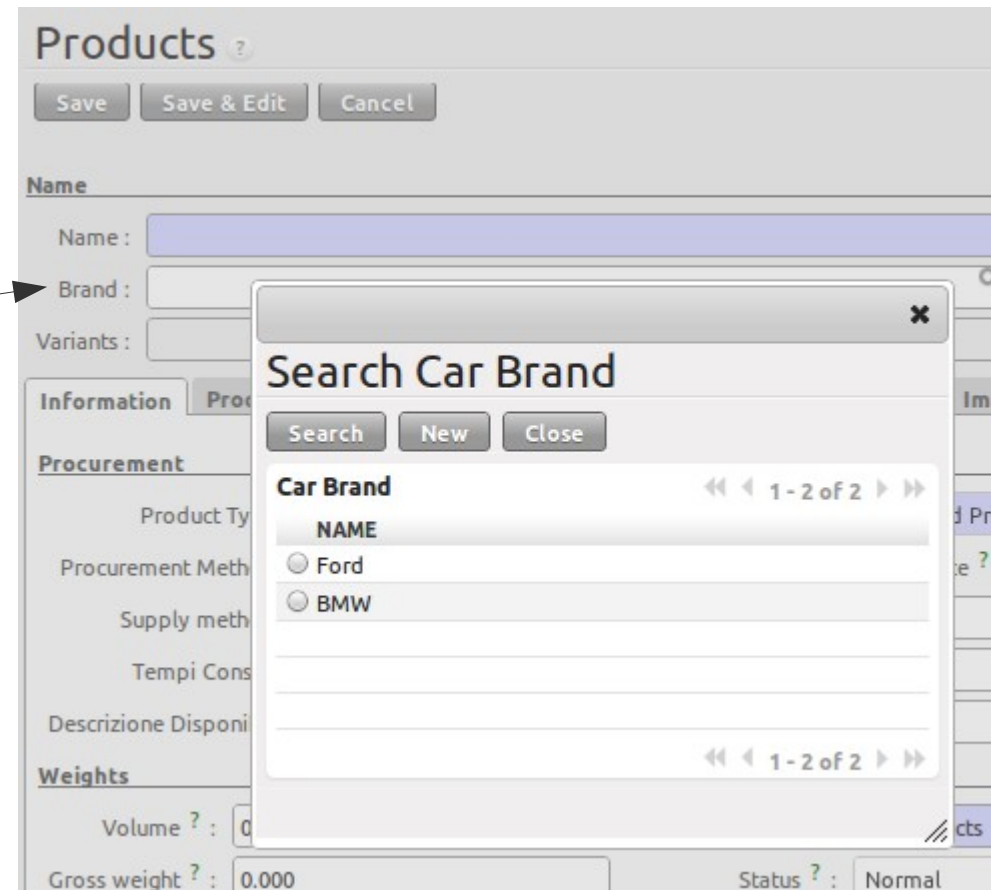
Other Options

Translate

Many2one Field

Relation: car.brand

```
21 class product_car_template(osv.osv):
22
23     _inherit = 'product.template'
24
25     _columns = {
26         'brand': fields.many2one('car.brand', 'Brand'),
27         'car_ok': fields.boolean('Is a car'),
28     }
29
30 product_car_template()
```



The screenshot shows the 'Products' form in Odoo. The 'Brand' field is highlighted with an arrow from the text 'Many2one Field' and 'Relation: car.brand'. A 'Search Car Brand' dialog box is open, showing a list of car brands: Ford and BMW. The dialog box has a 'Search' button, a 'New' button, and a 'Close' button. The list of brands is displayed with radio buttons next to each name. The dialog box also shows pagination: '1 - 2 of 2'.

OpenERP Apps

Name: Ford Focus - Ope... x OpenERP Apps x +

apps.openerp.com

Contact Us +32 81813700

Products Services Partners Community About Us

Search Modules Branch List Register Branch

OpenERP Apps

Version

- All Versions
- trunk
- 6.0
- 5.0

Certification


- All Modules
- Certified Modules
- Not Certified

Categories

- All Categories
- Finance
- Human Resources
- Localization
- Manufacturing
- Others
- Project Management
- Purchases
- Sales

Sort by: Date Name Downloads Clicks Page 1 on 125 1 2 3 4 5 > Last 1244 Modules Found


crm - Customer & Supplier Relationship Management 🏆



The generic OpenERP Customer Relationship Management.

Author	OpenERP SA
Updated	Jun 21, 2011 4:56:58 PM
Category	Sales
Statistics	5617 Clicks - 1719 Downloads
Documentation	See documentation

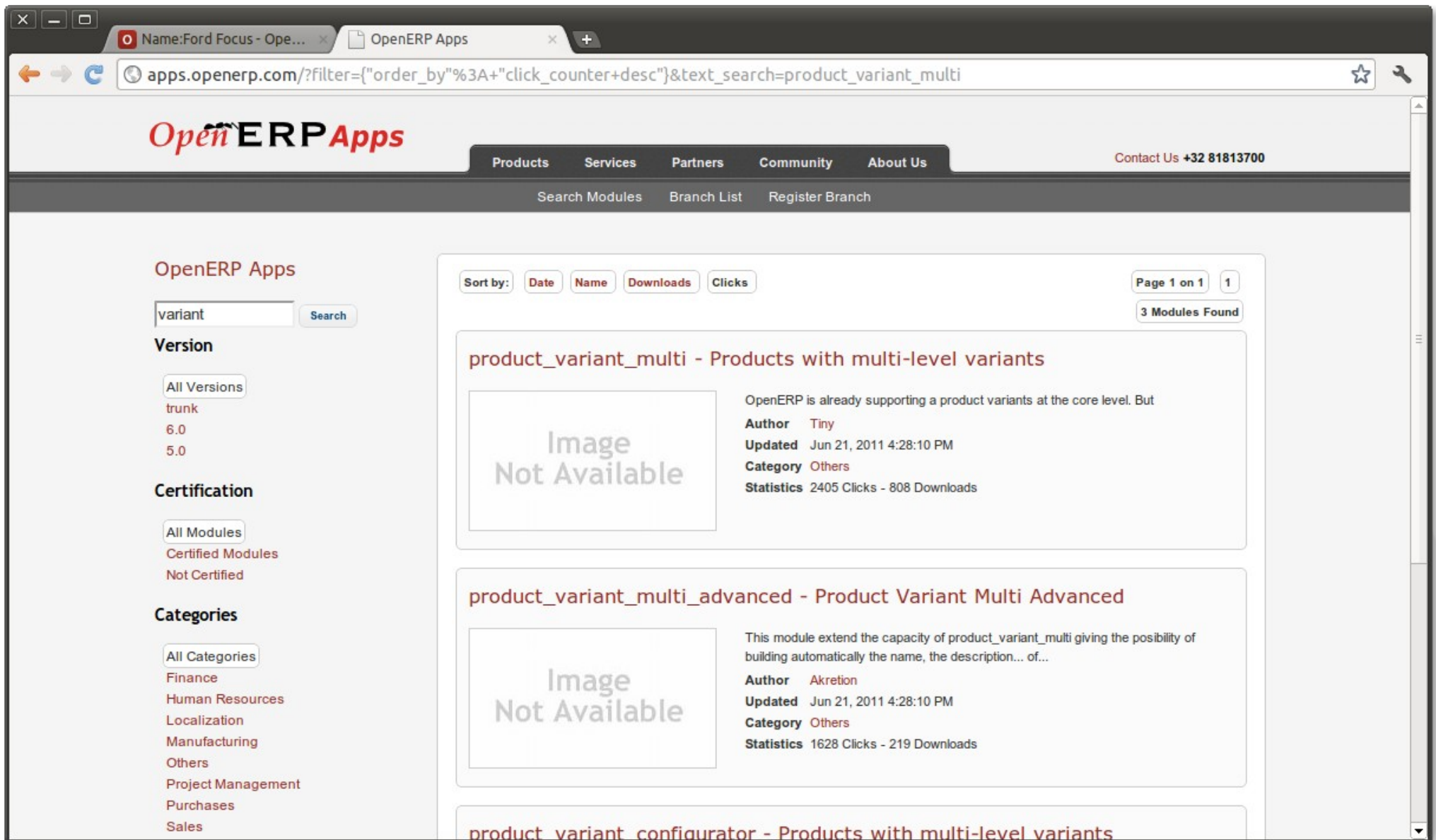
account - Accounting and Financial Management 🏆



Accounting and Financial Management.

Author	OpenERP SA
Updated	Jun 21, 2011 4:56:58 PM
Category	Finance
Statistics	4278 Clicks - 818 Downloads
Documentation	See documentation

project - Project Management 🏆



The screenshot shows a web browser window with the URL `apps.openerp.com/?filter={"order_by"%3A+"click_counter+desc"}&text_search=product_variant_multi`. The page features a navigation bar with links for Products, Services, Partners, Community, and About Us, along with a contact number +32 81813700. Below the navigation bar, there are links for Search Modules, Branch List, and Register Branch. The main content area displays search results for 'product_variant_multi'. On the left, there is a sidebar with filters for Version (All Versions, trunk, 6.0, 5.0), Certification (All Modules, Certified Modules, Not Certified), and Categories (All Categories, Finance, Human Resources, Localization, Manufacturing, Others, Project Management, Purchases, Sales). The search results list three modules: 'product_variant_multi - Products with multi-level variants', 'product_variant_multi_advanced - Product Variant Multi Advanced', and 'product_variant_configurator - Products with multi-level variants'. Each module entry includes a description, author, update date, category, and statistics.

OpenERP Apps

Products Services Partners Community About Us

Contact Us +32 81813700

Search Modules Branch List Register Branch

OpenERP Apps

variant Search

Version

All Versions
trunk
6.0
5.0

Certification

All Modules
Certified Modules
Not Certified

Categories

All Categories
Finance
Human Resources
Localization
Manufacturing
Others
Project Management
Purchases
Sales

Sort by: Date Name Downloads Clicks

Page 1 on 1 1

3 Modules Found

product_variant_multi - Products with multi-level variants

OpenERP is already supporting a product variants at the core level. But

Image Not Available

Author Tiny
Updated Jun 21, 2011 4:28:10 PM
Category Others
Statistics 2405 Clicks - 808 Downloads

product_variant_multi_advanced - Product Variant Multi Advanced

This module extend the capacity of product_variant_multi giving the possibility of building automatically the name, the description... of...

Image Not Available

Author Akretion
Updated Jun 21, 2011 4:28:10 PM
Category Others
Statistics 1628 Clicks - 219 Downloads

product_variant_configurator - Products with multi-level variants

OpenERP

Name: Ford Focus - Ope... x +

localhost:8080/openerp/menu?active=73#url=%2Fopenerp%2Fform%2Fedit%3Fmodel%3Dproduct.template%26id%3DFalse%26ids%3D%26view_ids%

MyCompany (ep2011)
Administrator

SUPPORT

LOGOUT

Customers | Products | Reconfigure

SALES WAREHOUSE ACCOUNTING ADMINISTRATION

Product Templates ?

Name : Ford Focus

Save Save & Edit Cancel

Product Description Product Type

Name : Ford Focus Is Multi Variants? : ☒ Can be Sold ? : ☒

SKU : 200 Brand : Ford Can be Purchased ? : ☐

Is a car : ☒

Information Properties Procurement & Locations Suppliers Descriptions Accounting Variants Accessories SEO Note

Dimension types New

DIMENSION	DESCRIPTION
Colour	
Type	

Variant Model Name ? : [NAME] -

Variant Model Name Separator ? : /

Code Generator ? :

Variant Type

Cancel

Dimension : Colour Description :

Sequence ? : 0 Allow Custom Value ? : ☐

Mandatory Dimension ? : ☒

VARIANT VALUE	SEQUENCE	SALE PRICE EXTRA	SALE PRICE MARGIN	PURCHASE EXTRA COST
Black	0	0.00	0.00	0.00
Pink	0	0.00	0.00	0.00
White	0	0.00	0.00	0.00

OpenERP

Name: Ford Focus - Ope... x +

localhost:8080/openerp/menu?active=73#url=%2Fopenerp%2Fform%2Fedit%3Fmodel%3Dproduct.template%26id%3DFalse%26ids%3D%26view_ids%

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Administrator

SUPPORT

LOGOUT

Customers | Products | Reconfigure

SALES WAREHOUSE ACCOUNTING ADMINISTRATION

Product Templates ?

Name : Ford Focus

Save Save & Edit Cancel

Product Description Product Type

Name : Ford Focus Is Multi Variants? : ☒ Can be Sold ? : ☒

SKU : 200 Brand : Ford Can be Purchased ? : ☐

Is a car : ☒

Information Properties Procurement & Locations Suppliers Descriptions Accounting Variants Accessories SEO Note

Dimension types New

DIMENSION	DESCRIPTION
Colour	
Type	

Variant Model Name ? : [NAME] -

Variant Model Name Separator ? : /

Code Generator ? :

Variant Type

Cancel

Dimension : Colour Description :

Sequence ? : 0 Allow Custom Value ? : ☐

Mandatory Dimension ? : ☒

VARIANT VALUE	SEQUENCE	SALE PRICE EXTRA	SALE PRICE MARGIN	PURCHASE EXTRA COST
Black	0	0.00	0.00	0.00
Pink	0	0.00	0.00	0.00
White	0	0.00	0.00	0.00

Product Description

Product Type

Name :
Is Multi Variants? : ☒
Can be Sold ? : ☒

SKU :
Brand :
Can be Purchased ? : ☐

Is a car : ☒

Information Properties Procurement & Locations Suppliers Descriptions Accounting Variants Accessories SEO Note

Dimension types

New

DIMENSION

DESCRIPTION

ALLOW CUSTOM VALUE

MANDATORY DIMENSION

✎

Colour

☐

☒

✕

✎

Type

☐

☒

✕

Variant Model Name ? :

Variant Model Name Separator ? :

Generate ->

Code Generator ? :

Build Code ->

Variants

New

REFERENCE

NAME

DIMENSION VALUES

✎

301

Ford Focus

Colour - Black / Type - Sporting

✕

✎

302

Ford Focus

Colour - Pink / Type - Sporting

✕

✎

303

Ford Focus

Colour - White / Type - Sporting

✕

✎

304

Ford Focus

Colour - Black / Type - Standard

✕

✎

305

Ford Focus

Colour - Pink / Type - Standard

✕

✎

306

Ford Focus

Colour - White / Type - Standard

✕

```
92 class product_template(osv.osv):  
93     _inherit = "product.template"  
94  
95     [...]  
96  
97     def button_generate_variants(self, cr, uid, ids, context={}):  
98         logger = netsvc.Logger()  
99         variants_obj = self.pool.get('product.product')  
100         temp_val_list=[]  
101         [...]  
102
```

Products - OpenERP

localhost:8080/openerp/menu?active=73#url=%2Fopenerp%2Fexecute%3Fpayload%3DeJxIU9uKGzEM_RW9eQPDsL1B6Qf0udDtQynL4lyViVmPbWQ76

MyCompany (ep2011)
Administrator

SUPPORT

LOGOUT

Customers | Products | Reconfigure

SALES WAREHOUSE ACCOUNTING ADMINISTRATION

Sales
Address Book
Invoicing
Products
Products by Category
Products
Product Templates
Product Variants
LFS tool
Reporting
Configuration

☆ Search: Products

SERVICES STOCKABLE TO SELL TO PURCHASE

Skus : Name : Category ? : Variants :

Extended Filters...

Group by...

Search Clear

- Filters -

Products New

	SKU	NAME	VARIANTS	UOM	PRODUCT TYPE	REAL STOCK	VIRTUAL STOCK	PUBLIC PRICE	COST PRICE	STATUS
<input type="checkbox"/>	301	Ford Focus	Colour - Black / Type - Sporting	PCE	Stockable Product	0.000	0.000	25,000.00	1.00	×
<input type="checkbox"/>	302	Ford Focus	Colour - Pink / Type - Sporting	PCE	Stockable Product	0.000	0.000	25,000.00	1.00	×
<input type="checkbox"/>	303	Ford Focus	Colour - White / Type - Sporting	PCE	Stockable Product	0.000	0.000	25,000.00	1.00	×
<input type="checkbox"/>	304	Ford Focus	Colour - Black / Type - Standard	PCE	Stockable Product	0.000	0.000	25,000.00	1.00	×
<input type="checkbox"/>	305	Ford Focus	Colour - Pink / Type - Standard	PCE	Stockable Product	0.000	0.000	25,000.00	1.00	×
<input type="checkbox"/>	306	Ford Focus	Colour - White / Type - Standard	PCE	Stockable Product	0.000	0.000	25,000.00	1.00	×

1 - 6 of 6

socket://admin@localhost:8070 en_US

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~thibaut-dirlik/openerp-rent/openerp-rent : files for revision 129 - Mozilla Firefox

File Edit View History Bookmarks Tools Help

https://launchpad.net/~thibaut-dirlik/

← Back to branch summary

~thibaut-dirlik/openerp-rent/openerp-rent

Changes **Files**

~thibaut-dirlik/openerp-rent/openerp-rent » Viewing / for revision 129

[view revision](#) [view branch changes](#)

Committer: Thibaut DIRLIK
Date: 2011-06-21 12:55:54
Revision ID: git-v1:106d93d03059ce9bcbb076f48e86e57b1423c674
 Updated documentation.

Filename	Latest Rev	Last Changed	Size		
docs	124	2011-05-24 11:48:05			
migrations	102	2011-05-19 09:00:12			
rent	20	2011-03-09 10:12:23			
rent_rtz	40	2011-04-01 14:39:19			
AUTHORS	71	2011-04-15 09:13:56	173		
LICENSE	20	2011-03-09 10:12:23	34.3K		
README.rst	92	2011-04-29 08:04:30	0.8K		

Loggerhead 1.18 is a web-based interface for [Bazaar](#) branches

Rent Order - OpenERP

localhost:8080/openerp/menu?active=73#url=%2Fopenerp%2Fform%2Fedit%3Fmodel%3Drent.order%26id%3DFalse%26ids%3D%26view_ids%3D%26

OpenERP MyCompany (ep2011) Administrator

Customers | Products | Reconfigure

SALES WAREHOUSE ACCOUNTING ADMINISTRATION

Sales
Sales Orders
Rent Orders
Address Book
Invoicing
Products
Reporting
Configuration

Rent Order

Save Save & Edit Cancel

Reference: RENT0000001 Date: 06/22/2011 11:25:47 Salesman: Administrator

Shop: MyCompany Fiscal Position:

Rent Order Invoices Notes

Customer: Ordering Address:

Shipping Address: Invoice Address:

Rent begin date: 06/22/2011 14:00:00 Shipping date: 06/22/2011 14:00:00 Return date: 06/22/2011 19:00:00

Duration: 1 Unity: Day Invoice Period: Once

Object:

Rent Order Lines New

PRODUCT	QUANTITY	UOM	DISCOUNT (%)	UNIT PRICE	DURATION	UNIT PRICE	SUBTOTAL	TYPE OF PRODUCT

Untaxed amount: 0.00 Taxes: 0.00 Total: 0.00 Compute

This rent order contains only services, no shipping will be done.

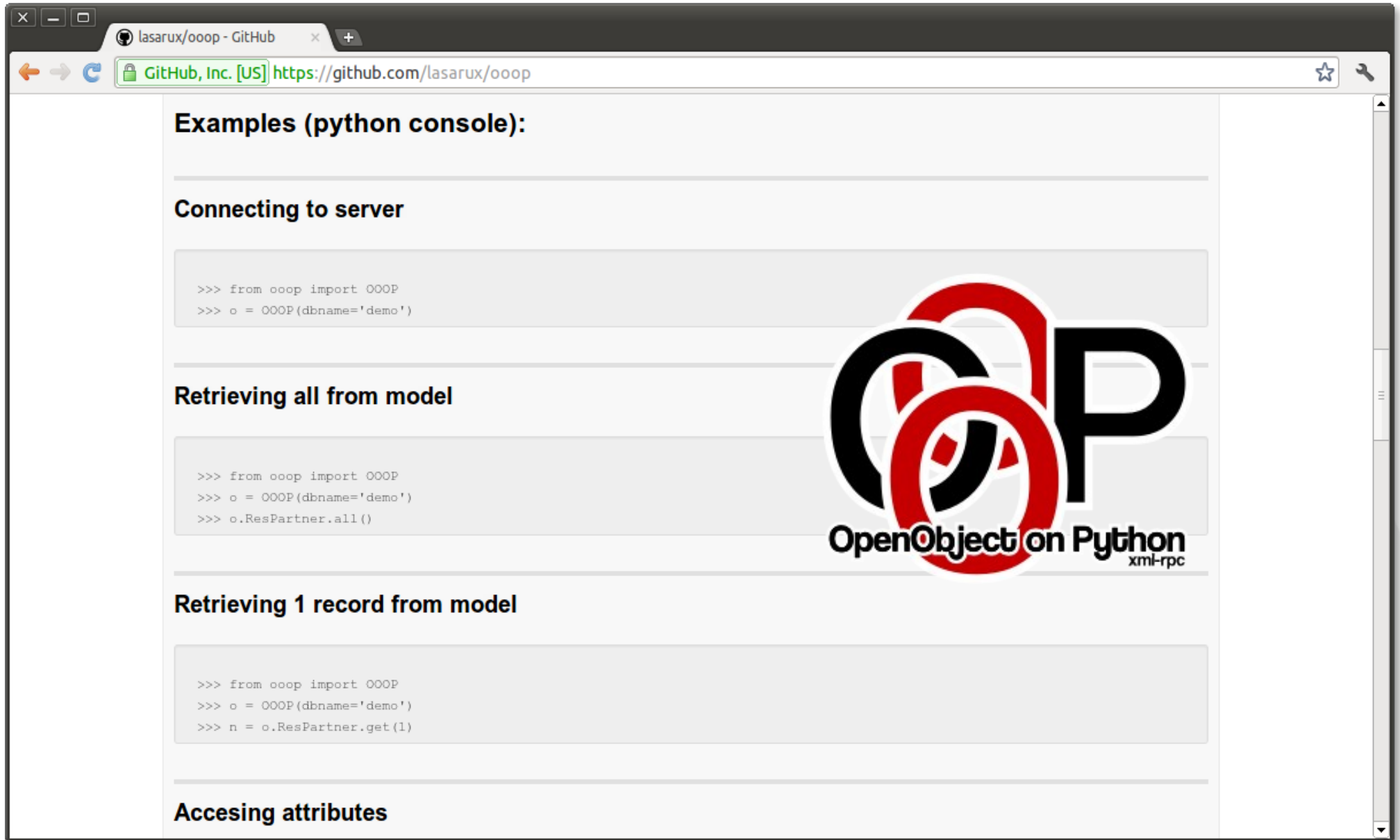
Reports
Quotation / Rent Order

Links
Delivery Order
Incoming Shipment
Invoices

Attachments
Add

Customize
Manage Views
Customize Object

Other Options
Translate



lasarux/ooop - GitHub

GitHub, Inc. [US] <https://github.com/lasarux/ooop>

Examples (python console):

Connecting to server

```
>>> from ooop import OOP
>>> o = OOP(dbname='demo')
```

Retrieving all from model

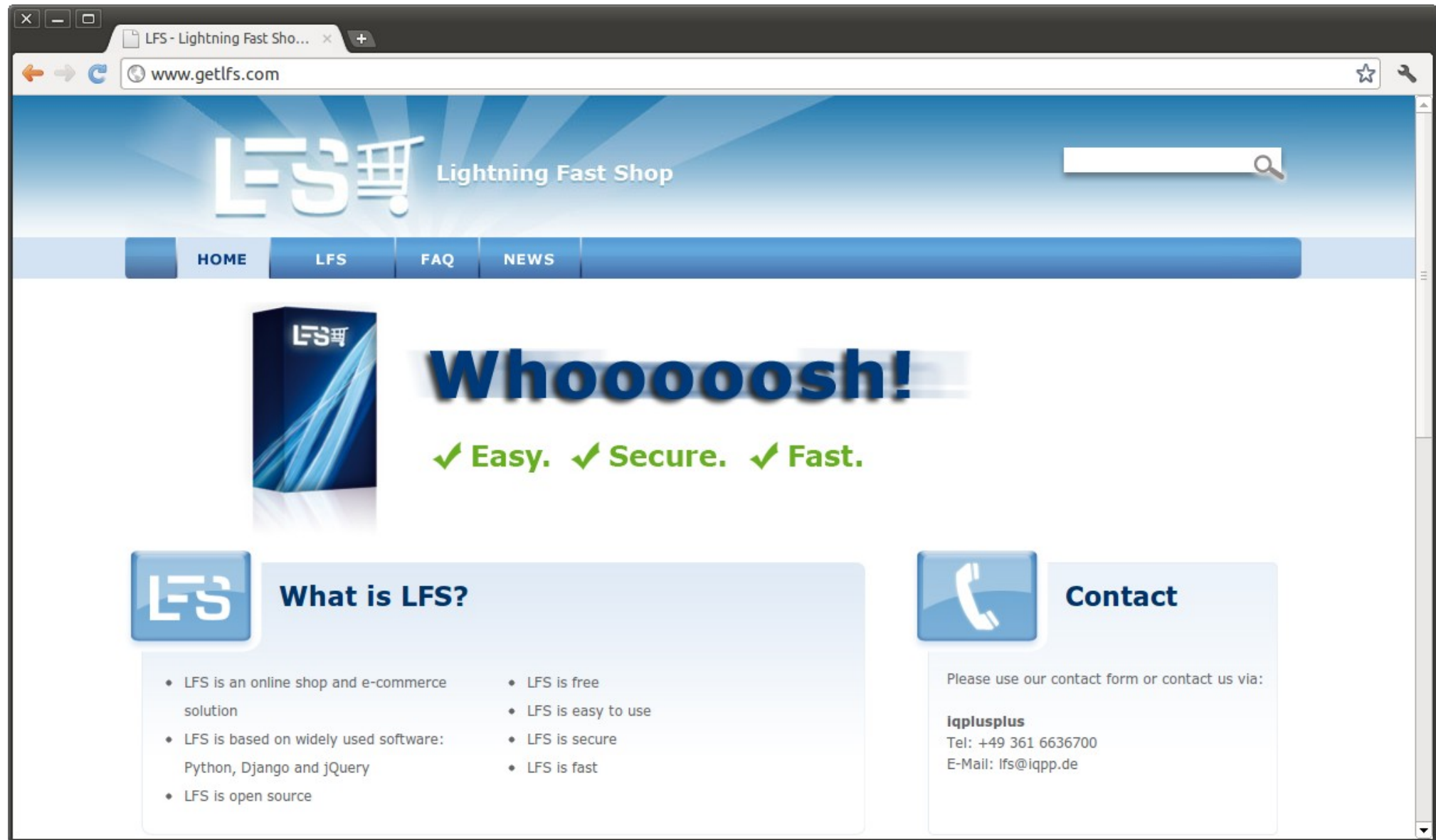
```
>>> from ooop import OOP
>>> o = OOP(dbname='demo')
>>> o.ResPartner.all()
```

Retrieving 1 record from model

```
>>> from ooop import OOP
>>> o = OOP(dbname='demo')
>>> n = o.ResPartner.get(1)
```

Accessing attributes

OpenObject on Python
xml-rpc



×

—

□

o Name:LFS Tool - OpenERP x +

localhost:8080/openerp/menu?active=73#url=%2Fopenerp%2Fform%2Fedit%3Fmodel%3Ddms.ie.tool%26id%3D1%26ids%3D%255B1%255D%26view

OpenERP

MyCompany (ep2011)
Administrator

SUPPORT

0

⚙

⬆

?

LOGOUT

Customers | Products | Reconfigure

SALES

WAREHOUSE

ACCOUNTING

ADMINISTRATION

Sales

Address Book

Invoicing

Products

Products by Category

Products

Product Templates

Product Variants

LFS tool

Reporting

Configuration

LFS tool

Name : LFS Tool

Save Save & Edit Cancel

1 of 1

Name : LFS Tool

Unique Name : lfs_tool

Server : localhost

Port : 8000

Username : admin

Password : admin

Autosync enabled ? ☐

Bulk enabled : ☒

Bulk size ? : 1

Actions

Sync categories

Sync products

Manual Updates

Import CSV : add attachment

Categories CSV : add attachment

Q.ty Update : add attachment

Import

Import

Update

Attachments

Add

Customize

Manage Views

Edit Workflow

Customize Object

Other Options

Translate

View Log

socket://admin@localhost:8070 en_US

Powered by openerp.com

o

Name:LFS Tool - OpenERP

x

F

Ford Focus - LFS

x

+

localhost:8000/product/ford-focus-FRDFCS

☆

LFS

Login

|

Search:

Go!

HOME

CONTACT

You are here: [Home](#) > [Cars](#) > [Ford](#) > Ford Focus

CATEGORIES

Cars

Ford

INFORMATION


Terms and Conditions

Imprint

>>> More information

<< Previous product - 1 of 1 - Next product >>

Back to overview



Ford Focus

Delivery time: 1-2 days


25,000.00 EUR*

*inc. VAT

Quantity:

Add to cart

Cart



Cart is empty

>>> Go to cart

Variants

	Name	Colour	Model	Price
<input checked="" type="radio"/>	Ford Focus	Black	Deluxe	25,000.00 EUR
<input type="radio"/>	Ford Focus	Red	Deluxe	25,000.00 EUR
<input type="radio"/>	Ford Focus	White	Deluxe	25,000.00 EUR
<input type="radio"/>	Ford Focus	Black	Standard	25,000.00 EUR
<input type="radio"/>	Ford Focus	Red	Standard	25,000.00 EUR
<input type="radio"/>	Ford Focus	White	Standard	25,000.00 EUR

Reviews

Name:LFS Tool - OpenERP
LFS


localhost:8000/added-to-cart

[Login](#) | Search:

HOME CONTACT

You are here: [Home](#) > Added to cart

This product has been added to cart

Product	Quantity	Price	Included VAT	Total
 <div> Ford Focus Colour: Black Model: Deluxe </div>	1	25,000.00 EUR	(0.00 EUR)	25,000.00 EUR

Total: 25,000.00 EUR

[Terms and Conditions](#) | [Imprint](#)

Powered by [LFS](#) — Lightning Fast Shop
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Agile Business Group: <http://www.agilebg.com>

OpenERP: <http://www.openerp.com>

OpenERP documentation: <http://doc.openerp.com>

OpenERP Rent: <http://launchpad.net/openerp-rent> (thanks to Thibaut Dirlik)

LFS: <http://www.getlfs.com>

OOOP: <https://github.com/lasarux/ooop>

LFS Connector and examples: soon on <http://launchpad.net>

@davidecorio on twitter!

Thanks to everyone